13-R

PHASE I BOOK EXPLOITATION

SOV/5910

# Ivanov, Georgiy Petrovich, Candidate of Technical Sciences

- Tekhnologiya elektroiskrovogo uprochneniya instrumentov i detalay mashin (The Technology of Electrospark Hardening of Tools and Machine Parts) 2d ed., rev. and enl. Moscow, Mashgis, 1961. 302 p. Errata elip inserted. 8000 copies printed
- Reviewer: L. Ya. Popilov, Engineer; Ed. of Publishing House: A. F. Balandin; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Cold Working of Metals and Machine-Tool Making: V. V. Rzhavinskiy, Engineer.
- PURPOSE: This book is intended for engineers, technicians, and foremen of machine-building plants, repair organizations, and shops for servicing automobiles, agricultural implements, construction and road-building machines, locomotives, and diesels.
- COVERACE: The book reviews problems of the electrospark hardening and alloying of metal surfaces. The principles of this process and techniques of its application are outlined. New electrospark equipment and the semiautomatic head Card 1/10

\$/117/62/000/001/006/006 A004/A101

AUTHOR:

Ivanov, G. P., Candidate of Technical Sciences

TITLE:

An analytic method of selecting materials is necessary

PERIODICAL: Mashinostroitel', no. 1, 1962, 42

The author states that, although the right choice of materials is one of the most important factors in the production of high-quality machine parts, TEXT: there is, hitherto, no scientifically founded system to deal with this problem. He shows the drawbacks of the existing considerations and methods by which the materials are chosen and points out that, in most cases, materials with a very low efficiency are made use of. The author suggests an analytic method of selecting the suitable material, which consists in that each material in any possible state is designated by a multiple-digit number, each digit of which marks the quality index of definite properties. The writing order should be strictly constant, while the most important and universal characteristics are written down in the first columns, the less important ones in the following columns. The author presents a table giving an example of how the numbers of an eight-index system are grouped.

Card 1/3

CIA-RDP86-00513R000619030002-0" APPROVED FOR RELEASE: 08/10/2001

S/117/62/000/001/006/006 A004/A101

An analytic method of selecting materials is necessary

Materials	strength	hard- ness	ductil- ity	corro- sion resist- ance	resist- ance to wear		cheap- ness	magnetic permeabil- ity
Lead	0 2 3	0 2 3	9 9 9	9 6 7	0 2 3	1 8 2	4 2 3	0 0
CY (SCh) 12-28 cast iron Grade 45 steel .		5 8	0 5	5 2	8 9	3 3	8	8 9

Provided with such a table, the designer will not select the materials by tradition or at random; if one material needs to be replaced by another, it is easy to select a suitable substitute. Even if, with the increasing assortment of materials and improvement of the method itself, these tables would have tens of the characteristic properties after some time and thus become too intricate to be used by the designers, this will be compensated by using electric computers to find

Card 2/3

Card 3/3

EWT(d)/EWP(k)/EWP(q)/EWT(m)/BDS-AFFTC/ASD--Pf-4--JD

L 11206-63 ACCESSION NR: AP5000142

8/0125/65/000/005/0054/0042

60

AFFEOR: Timebenko, V. A.; Ivanov, G. F.

TIPLE: Digital program control of welders for hard facing and welding joints of intricate shape [Report at the Conference on Automatic Welding Control, Kiew, 25] December 1962]

SOURCE: Avtomaticheskoya svarka, no. 5, 1963, 34-42

TOPIC TAGS: digital program control, hard-facing dies, U-61 hard-facing welding machine

ARSTRACT: A simplified method of programing the electrods (or work) feed in building-up or complicated-configuration welding has been developed. The method uses standardized feed-path subprograms, a rather coarse (0.5-1 mm) feed per pulse, and is suitable either for a rough feed over a great length or for a precise feed over a short length. No computer or interpolator is required. A simplified method of preparing the interpolated program coded on a punched tage was patented by M. D. Litvinchuk and V. A. Timchenko (Authorship Certificate 145181, "Hyulleten' izobxetteniy", No. 12, 1962). A new U-61 welding machine designed and built in the Institute of Electric Welding (see Association) is intended for building up complex dies. It has the following principal characteristics: table size - 650 x 650 nm, Cord 1/2

#### "APPROVED FOR RELEASE: 08/10/2001

#### CIA-RDP86-00513R000619030002-0

L 11206-63 ACCESSION NR: AP3000142

table travel - 600 mm, electrode vertical feed - 400 mm, building-up rate - 15-45 m per hr, electrode dismeter - 2-4 mm, electrode feed rate - 80-240 m per hr, welding current - 189-600 amp, are voltage - 19-28 v, weight of the machine promer -1,900 kg. ShD-47step-by-step motors and M118-14M4hydrosmplifiers are used in the U-61 machine. Orig. art. has: 9 formulas, 5 figures, and 1 table.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN WHSR (Rustitute of Electric Welding, Academy of Sciences UkrSSR)

SURMITTED: 21 Jan 65

DATE ACQ: 12Jun63

ENCL: 00

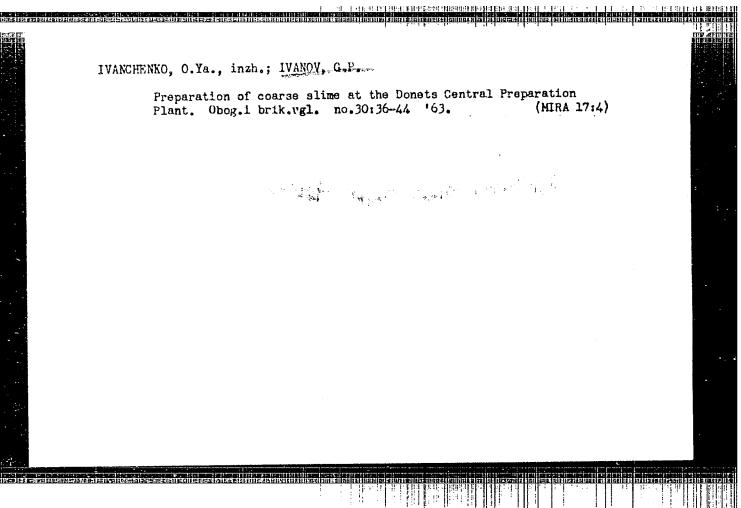
SUB CODE: ML, SD

NO REF SOV: 005

OTHER: 000

APPROVED FOR RELEASE: 08/10/2001

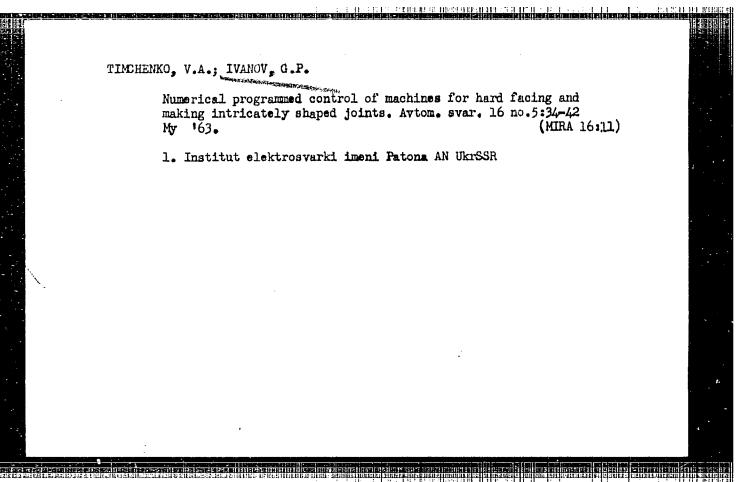
CIA-RDP86-00513R000619030002-0"

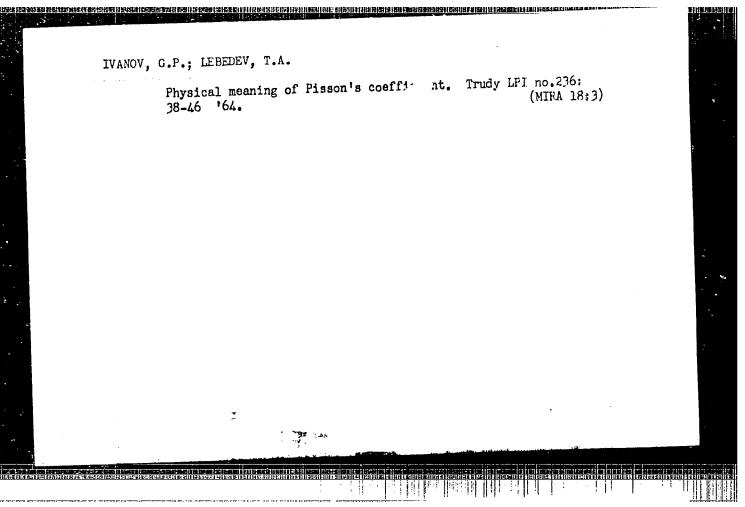


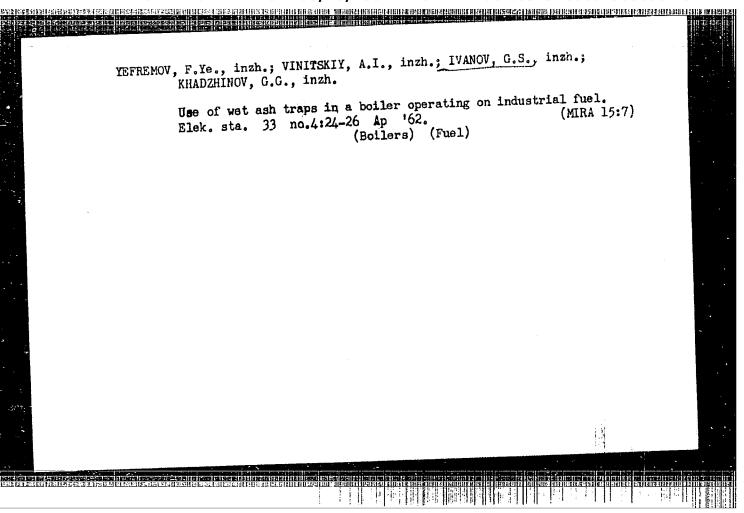
TISHURA, V.I.; BERZIN, A.I.; IVANOV, G.P.

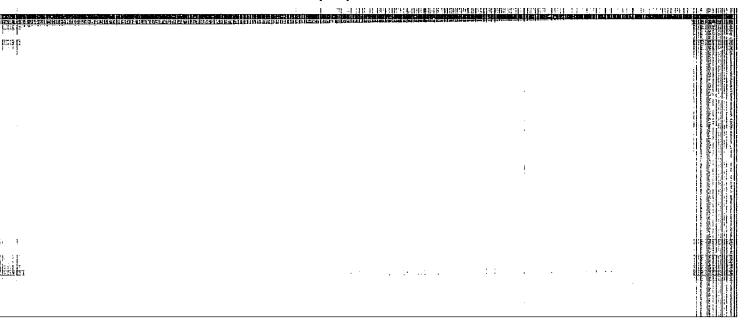
New type of tongs with built-in transformers. Avtom. svar. 16 no.1:54-59 Ja '63. (MIRA 16:2)

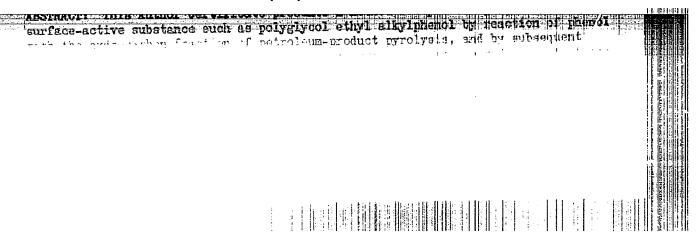
1. Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR. (Electric welding—Equipment and supplies)











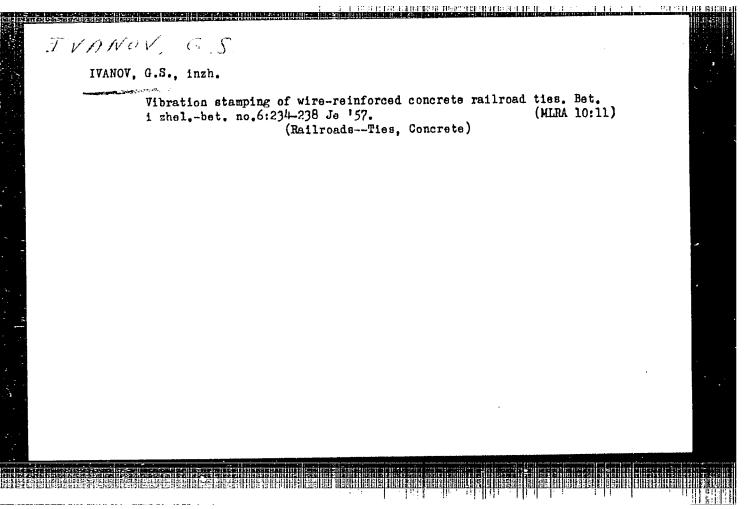
SHESTOPEROV, S.V., doktor tekhnicheskikh nauk; BOGIN, N.M., kanlidat tekhnicheskikh nauk; IVANOV. G.S., inzhener; LUKICHEV, N.A., inzhener; DAVYDOV, L.S., inzhener; GROMOV, V.S., inzhener; POPOV, N.A., inzhener; ZHU-RAVLEV, G.M., master.

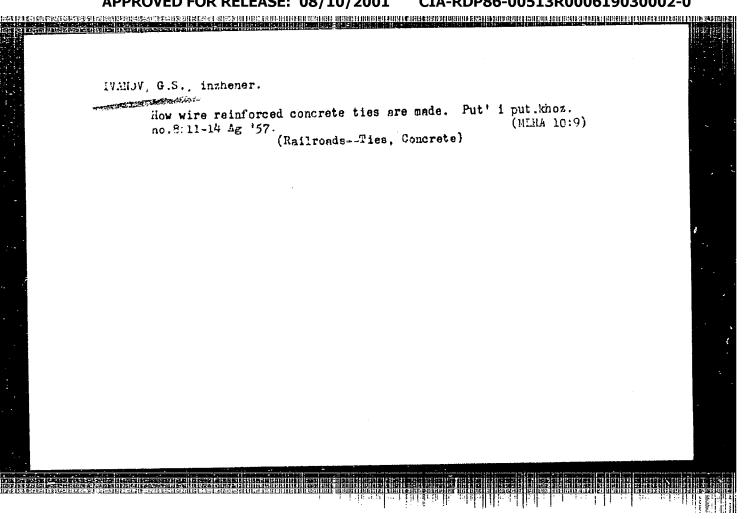
Vibrators for making wire reinforced ties on stands. Transp.stroi. 6 no.3:12-14 Mr '56. (MLRA 9:7) (Railroads--Ties, Concrete)

IVANOV, G. S., Cand Tech Sci -- (diss) "Study of the technology of manufacture of cross-brace concrete ties." Mos,
1957. 15 pp (Mos Order of Lenin and Order of Labor Red Banner
Inst of Railrand Engineers of Railroad Transportation in I. V.
Stalin, Chair of Construction Industry), 110 copies (KL, 5257, 107)

- 54 -

IVAN	Building blast furnace ore-bin and bun 7-8 Ap '57.	ker treatles. Stroitel' no.4; (MIRA 10:6)	
	1. Glavnyy inzhener tresta Makstroy. (Trestles)	(Blast furnaces)	
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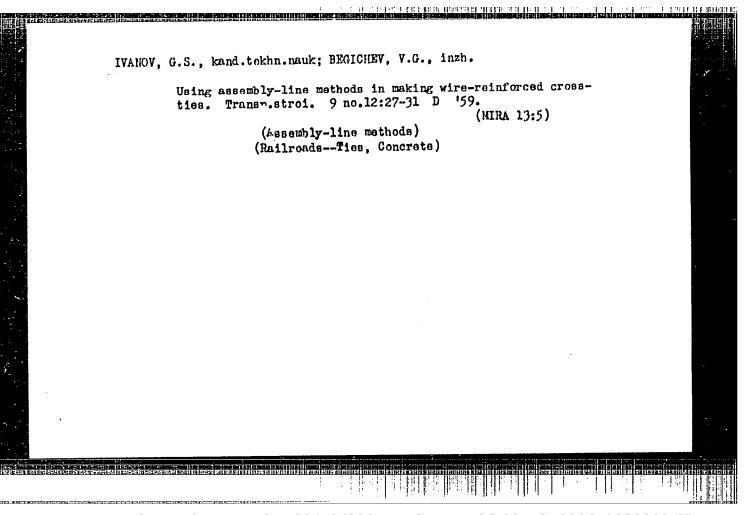


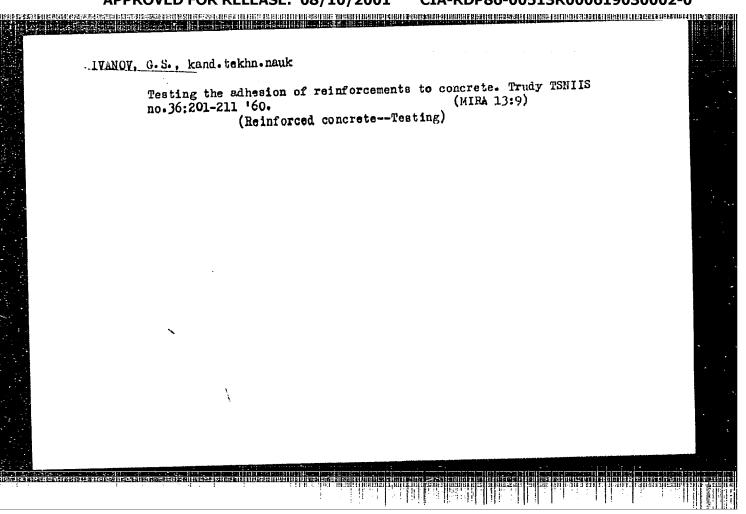


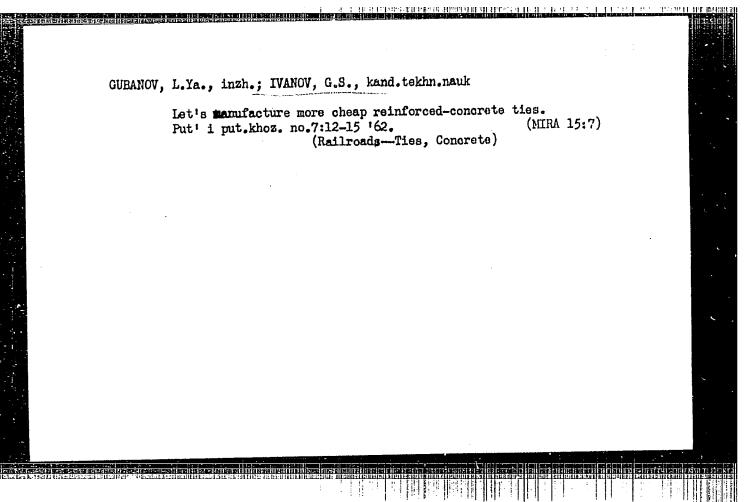
SHENTOPEROV, S.V., doktor tekhn.nauk; IVANOV, G.S., kand.tekhn.nauk;
ANDREYCHENKO, A.V., insh.

Stand-mixed technique of manufacturing wire-reinforced concrete ties. Transp.stroi. 9 no.1:35-39 Ja '59. (MIRA 12:2)

(Railroads--Ties, Concrete)



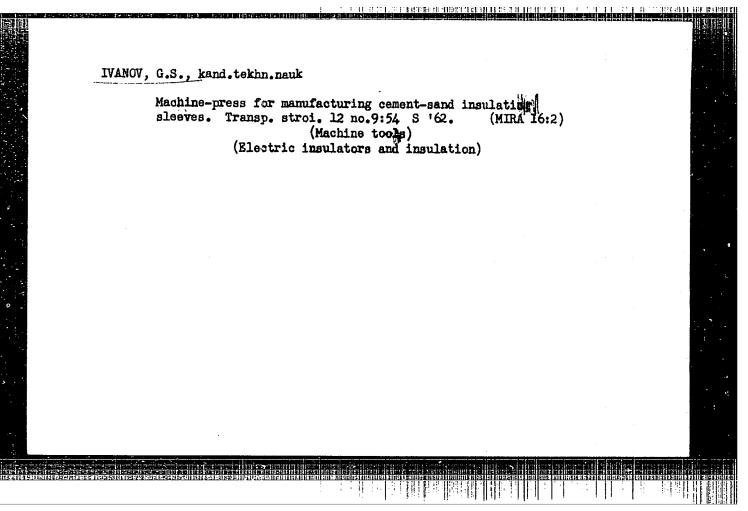


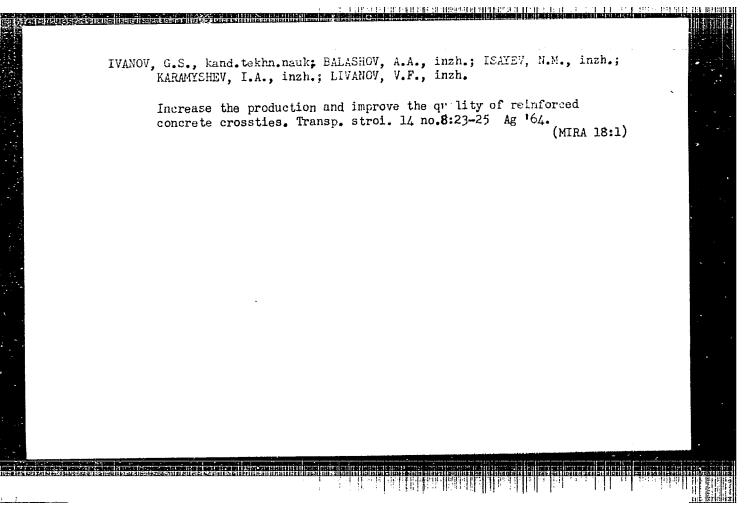


IVANOV, C.S. kand.tekhn.nauk; BLYAKHMAN, Yu.M., inzh.; FOPOV, K.A., tekhnik

Automatic programmed regulator for autoclaves. Transp.stroi.
12 no.7:36-39 Jl \*62. (MIRA 16:2)

(Automatic control) (Autoclaves)





SOURCE CODE: UR/0413/66/000/022/0102/0103 (A,N)AP 7000340 AUTHOR: Katys, G. P.; Karasik, L. L.; Il'inskiy, V. M.; Mel'nichenho, B. Ye.; Ivanov, G. S. ORG: none TITLE: Mass flowmeter. Class 42, No. 188696 SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 102-103 TOPIC TAGS: flow meter, flow measurement, flow, flow analysis ABSTRACT: An Author Certificate has been issued for a mass flowmeter consisting of two engine-driven straight-blade vanes, a stream-guide device with spring-loaded blades, and a signaling unit. To increase the instrument's measurement range and reduce its power requirements and weight, the stream-guide device is equipped with a group of blades consisting of elastic plates located in the output portions of tha flat blades, with one end hinged and the other end spring-loaded. Orig. art. has: 1 figure. SUB CODE; 20/ SUBN DATE: 17Aug65 UDC: 681.121.8:531.75

Wanov, G. S.

USSR/Geophysics - Hydrology

"Some Problems of Marine Hydrological Observatioms,"
G.S. Ivanov, State Inst of Oceanography, and N.I.
Koxitakiy, Admin of Observation Stations

"Meteorol i Gidrol" No 12, pp 46-48

Advocate use of observations of water level at marine hydrolog stations, more uniform stds of observation, and increase in the network of stations.

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IVANOV G. 5.

IVANOV G.S., otvetstvennyy red.; VIASOVA, Yu.V., red.; ERANGINA, M.I.,

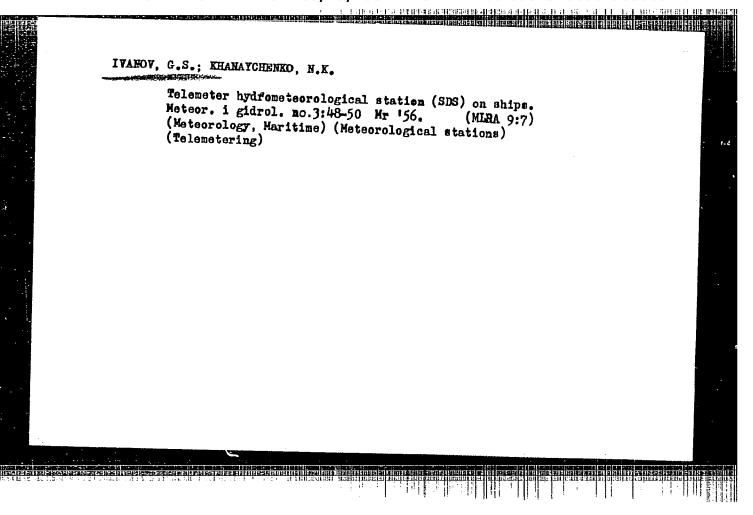
[Instructions for hydrometeorological stations and posts]

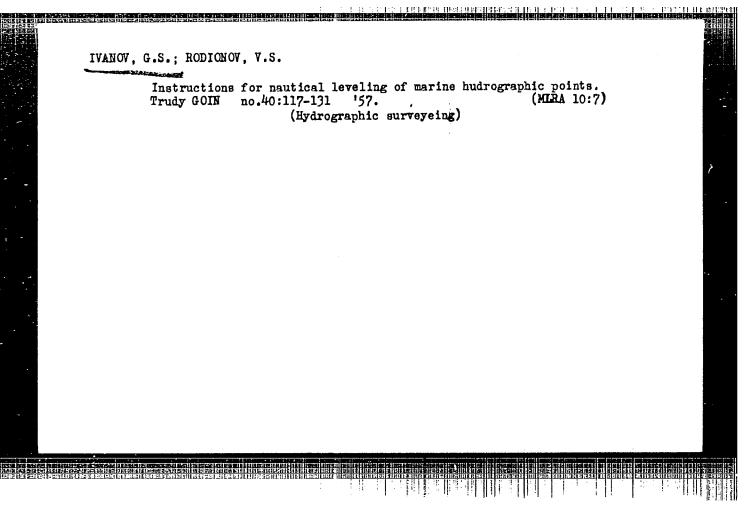
Nastavlenie gidrometeorologicheskim stantsiiam i postam.

Izd.2-oe. Leningrad, Gidrometeor.izd-vo. No.9. [Hydrometeorological observations at ocean stations] Gidrometeorologicheskie mabliudeniia na morskikh stantsiiakh. Pt.l. [Hydrological observations at the shore] Pribrezhnye gidrologicheskie nabliudeniia. 1956. 290 p.

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

(Oceanography) (Hydrology)





SIROTKINA, A.I., kend.geograf.nauk; IVANOVA, Z.N., mladshiy nauchnyy sotrudnik; BORISOV, N.D., Prinimali uchastiye: OTDELENOVA, N.N., tekhnik; SKITEYKIN, A.I., tekhnik. PKRLOVSKAYA, A.D., red.; IVANOV, G.S., kand.tekhn.nauk, otv.red.; ZARKH, I.M., tekhn.red.

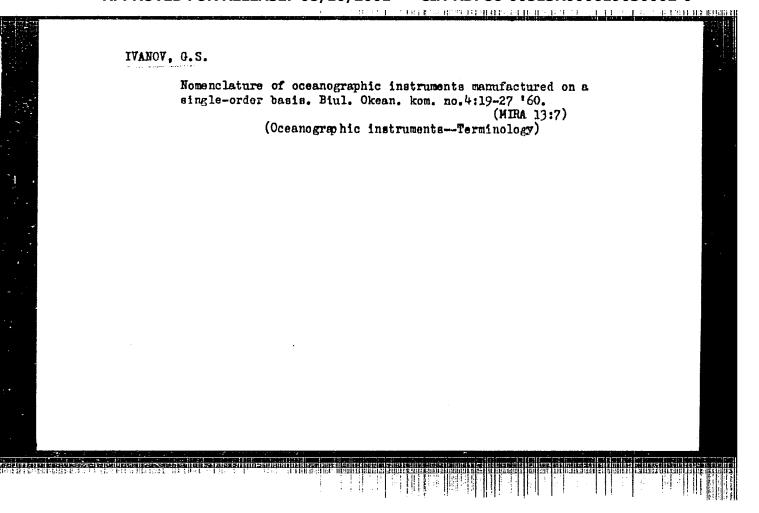
[Directions for meteorological and hydrological stations and posts] Nastavlenie gidrometeorologicheskim stantsiism i postam.

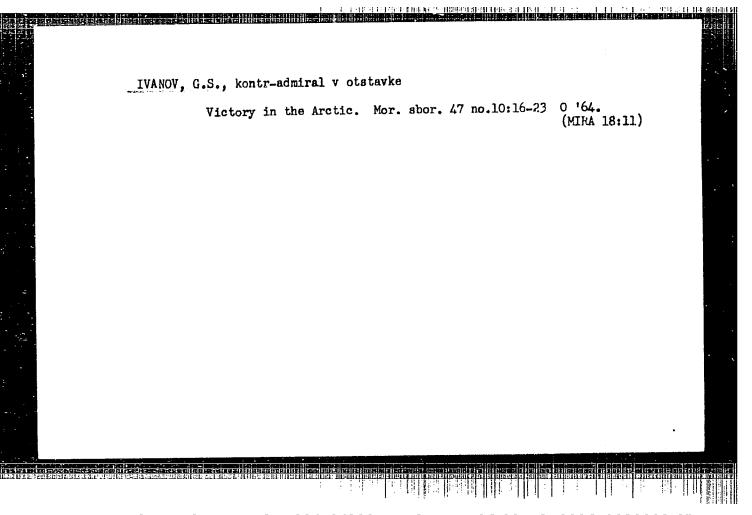
Moskva, Gidrometeor.izd-vo. No.10. [Inspection of meteorological and hydrological stations and posts] Inspektsiis gidrometeorologicheskikh stantsii i postov. Pt.5. [Inspection of meteorological and hydrological ship stations] Inspektsiis sudovykh gidrometeorologicheskikh stantsii. 1959. 45 p. (MIRA 13:8)

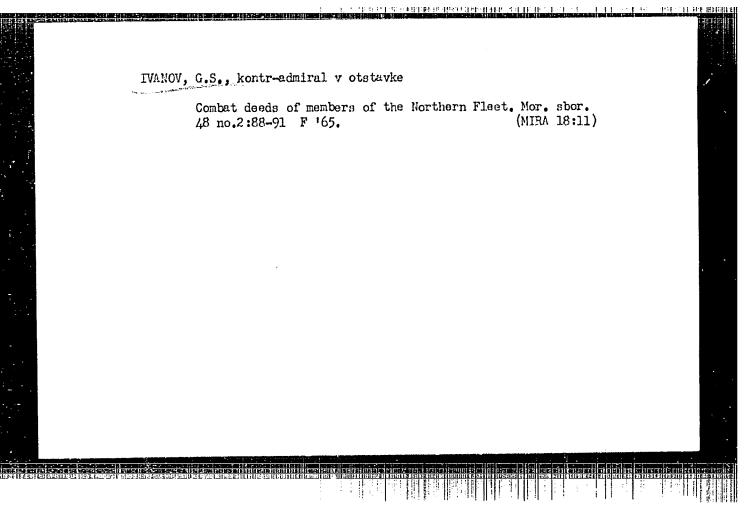
1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. 2. Nauchno-issledovatel'skiy institut aeroklimatologii (for Sirokina). 3. Gosudarstvennyy okeanograficheskiy
institut (for Ivanova). 4. Leningradskoye otdeleniye Gosudarstvennogo okeanograficheskogo instituta (for Borisov). 5. Nachal'nik
Metodicheskogo otdela Gosudarstvennogo okeanograficheskogo instituta
(for Ivanov).

(Meteorology, Maritime)

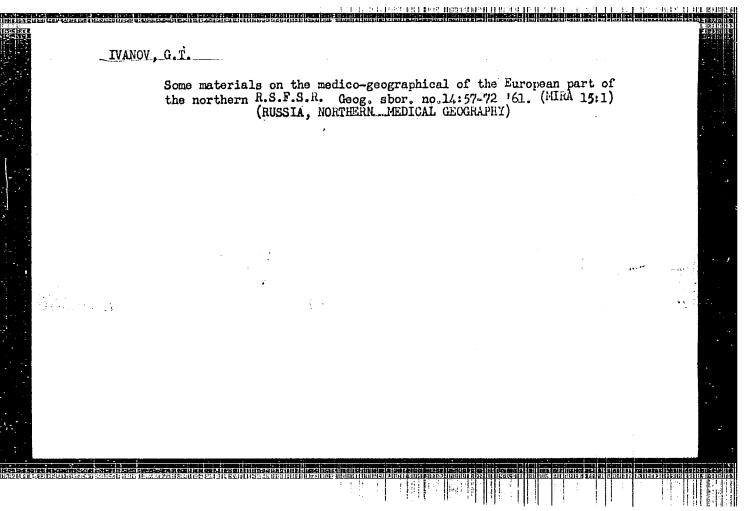
(Oceanography)







KRUGLIKOV, N.V., polkovnik meditsinskoy sluzhby; IVANOV, G.T., kand.med.nauk, podpolkovnik meditsinskoy sluzhby; IGNAT\*TEV, Ye.I., dotsent, podpolkovnik meditsinskoy sluzhby; IGNAT\*TEV,



IVANOV, G. T.

"Endurance of the Alloy D16 in Connection With the Technology of Its Machining." Sub 3 Jul 51, Moscow Aviation Technological Inst

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

INANOV, & T. . 18(4)

PHASE I BOOK EXPLOITATION

sov/2686

Moscow. Aviatsicnnyy tekhnologicheskiy institut

Voprosy soprotivleniya materialov; prochnost' alyuminiyevykh splavov (Problems of the Strength of Materials; Strength of Aluminum Alloys) Moscov, Oborongiz, 1959. 117 p. (Series: Its: Trudy, vyp. 37) 3,600 copies printed.

Sponsoring Agency: Ministerstvo vysshego obrazovaniya SSSR.

Ed. (Title page): S.V. Serensen; Ed. (Inside book): B.V. Zaslavskiy; Ed. of Publishing House: L.I. Sheynfayn; Tech. Ed.: L.A. Garnukhina; Managing Ed.: A.S. Zaymovskaya, Engineer.

PURPOSE: This collection of articles is intended for workers of engineering design offices, industrial laboratories and scientific institutes of the machine-building industry and for research fellows and students of advanced courses in schools of higher technical education.

COVERAGE: This collection consists of 8 articles in which mechanical properties of deformed aluminum alloys are described. The load-carrying capacity of parts

Card 1/4

Harris I

outernatur. Inclusion leteratural electrical estatus estatus des que le que le company de la company de company sov/2686. Problems of the Strength of Materials (Cont.) made of these alloys is considered and some results of the investigation of the distribution of stresses and strains in parts and joints are given. TABLE OF CONTENTS: 1. Peshina, Ye. The Effect of Design and Material of a Rotating Disk on Stressed Condition and Load-carrying Capacity The author considers problems of load-carrying capacity in elastic plastic conditions in connection with the special features of the diagram of the deformation of material in rotating disks. 2. Ivanov, G.T., and I.A. Skoryy. The Problem of Approximation of 1.3 Deformation Diagrams The properties of the deformation diagrams analyzed for aluminum structural alloys are discussed. 3. Giatsintov, Ye. V. Effect of some Structural Parameters on the 33 Distribution of Stresses in Fir Tree Fastenings The stressed condition in an elastic region in flexure is analyzed based on the example of a blade root fir tree fastening. The dependence of the stressed condition on the design parameters, Card 2/4

क्षाः भिन्ना ==

sov/2686 Problems of the Strength of Materials (Cont.) introduction of  $\phi_{\rm constraints}$  combination of elastic properties of materials of the blade and disk are shown. 4. Stepanov, Ye.P. Investigation of Stresses in a Wedge Under a Triangular Load (Applied to Cutters) The author uses the optic method of investigating stresses which makes possible an analysis of the applicability of corresponding theoretical solutions to the determination of a plane stressed state in cutters. 5. Kogayev, V. P. Basis for the Choice of an Equal Strength Beam for Calibrating Wire Tensometers in the Presence of Transversal 62 Vibrations In connection with the elaboration of equipment for the calibration of transmitters, calculation of an equal strength beam with transversal vibrations present is given. 6. Serensen, S.V., M.N. Stepnov, V.P. Kogayev, and Ye. V. Giatsintov. Stability of the Function of Distribution of Durability in Testing the Stability of Aviation Alloys Card 3/

DESCRIPTAR DESCRIPTOR DESCRIPTOR DE LA CONTROL DE LA CONTR Problems of the Strength of Materials (Cont.) sov/2686 Problems of the stability of aviation structural alloys are considered in the static aspect in order to obtain a stable distribution of durability at various levels of stress. 7. Vorenev, S.M. [Deceased], and M.N. Sternev. Fatigue Limit of Aluminum Alloy AK5 With a Slatelike Structure of Fractures 85 The relation of fatigue to statelike structure of fractures is analyzed in studying the stability of aviation structural alloys. 8. Stepnov, M.N. Surface Strengthing of Aluminum Alloys AK4-1 and UD17 by Hammer Hardening 96 Fatigue resistance of cold-hammered samples with changing parameters of the strengthened layer and the mechanical properties of the layer are described. The dependence of the value of final stresses on the hammering technology is shown and thestrengthened layer are determined. AVAILABLE: Library of Congress IS/gmp Card 3/4 12-9-59 

#### "APPROVED FOR RELEASE: 08/10/2001

#### CIA-RDP86-00513R000619030002-0

31651

107000

S/536/61/000/051/006/006 D040/D112

AUTHORS: Ivanov, G.T., Strelyayev, V.S.

TITLE: Investigation of the mechanical properties of aluminum alloys

under compression

SOURCE: Moscow. Aviatsionnyy tekhnologicheskiy institut. Trudy, no.51,

1961, 90-99. Issledovaniya ustalosti i dlitel'noy prochnosti

alyuminiyevykh splavov.

TEXT: The authors describe an investigation into the mechanical properties of B 95 (V95),  $\Omega$  16 (D16) and AK 4-1 (AK4-1) aluminum alloys in a hardened and aged state, subjected to compression and tension; the purpose of the tests was to obtain a curve  $\delta = f(\xi)$  covering a wider range, with Evalues of up to  $10 \div 15\%$ , as normally such tests are made only up to  $\xi = 1\%$ . The composition of the above alloys is as follows:

<b>V</b> 95	<u>Cu</u> 1.75	<u>Mg</u> 2.45	<u>IIn</u> 0.32	<u>Fe</u> 0.34	<u>Si</u> 0.22	Ti -	$\frac{Zn}{6.49}$	$\frac{\mathbf{Cr}}{0.18}$	$\frac{Zr}{0.07}$	Ni -
D16	4.49	1.45	0.71	0.22	0.19	0.03	0.07	-	-	-
AK4-1 Card 1,	2.02 /4	1.51	0.03	0.16	0,20	0.09	0.25	-	-	1.14

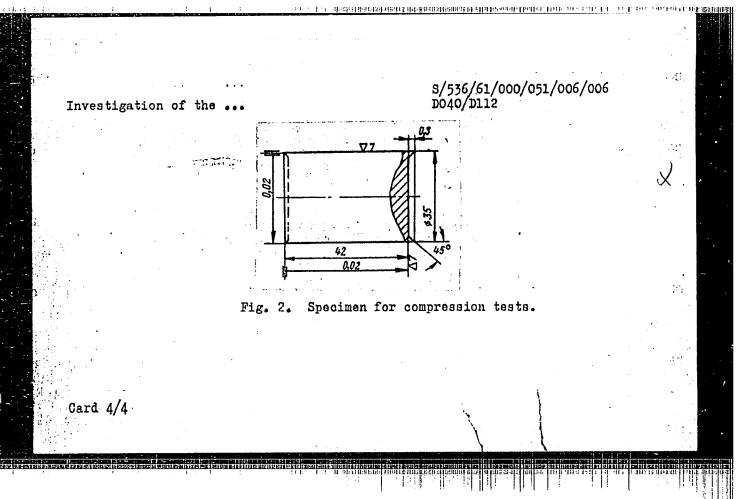
31651 S/536/61/000/051/006/006 Investigation of the ... D040/D112

The design of the test specimen (Fig. 2) was chosen after a study of the effect of the type of flange and lubricant on the test results. It was recommended, to prepare the specimens from round rods and not from pressed plates, as during the pressing process the latter become anisotropic. Paraffin and stearin were used for lubricating the specimens, and oil for lubricating the pressing tools. The deformations were measured with a Martens tensometer. The experiments included an attempt to determine the Poisson factor in the elastic-plastic compression interval and the theoretical dependence of the Poisson factor on the deformation degree, using A.M. Zhukov's formula (Ref. 18. Izvestiya AN SSSR, 1954, no.12); the obtained theoretical values agreed well with the empirical values. The compression curve  $\delta = \Phi(\xi)$  was approximated by a linear-rational function used by G.T. Ivanov and I.A. Skoryy for the approximation of tension curves (Ref.19, Ivanov, G.T., Skoryy, I.A., K vopresu ob approksimatsii diagramm deformirovaniya Contribution to the approximation of deformation curves], Sb. trudov MATI, vyp 37, Oborongiz, 1959). Conclusions: (1) There is no essential difference between the moduli of elasticity, elasticity limits and yield limits of the investigated alloys in the ha and aged state either during compression or during tension. (2) At high deformations ( $\xi > 0.5\%$ ), the modulus of hardening during compression is high-Card 2/4

Investigation of the ...

S/536/61/000/051/006/006
D040/D112

er than the modulus of hardening during tension. (3) The Poisson factor increases with increasing deformation (up to£=1.0%) up to 0.44-0.45. (4) Hyperbolio approximation of tension and compression curves proved satisfactory. The following are mentioned: B.Siebel, V.D.Kužneteov, M.A.Bol'shanina, K.K.
Likharev, A.S.Kalmanok, V.R.Regel', K.V.Rupeneyt, S.I.Ratner and Yu.S.
Danilov, A.V.Rastegayev and G.D.Pološakkin. There are 7 figures, 4 tables and 19 references: 11 Soviet and 8 non-Soviet-bloo. The four most recent references to English-language publications read as follows: Stowell, E., Pridle, R., NACA Techn. Notes; 1956, N 3736; Mathanser, Eldon, Deveikts, NACA Report, 1957, N'1308; Book of ASTM Standards, 1956, Part 2; ASTM Bulletin, 1956, N 215.



SERENSEN, Sergey Vladimirovich; GIATSINTOV, Yevgeniy Valentinovich; KOGAYEV, Vladimir Petrovich; STEPNOV, Mikhail Nikitovich; Prinimali uchastiye: BAL'ZOVSKIY, F.K.; BORODIN, N.A.; VETKIN, I.I.; IVANOV, G.T.; ZASLAVSKIY, B.V., kand.tekhn.nauk, red.: NOVIK, A.Ya., tekh.red.

[Structural strength of airplane alloys] Konstruktsionnaia prochnost aviatsionnykh splavov. Moskva, Gos.nauchno-tekhn. izd-vo obor., 1962. 100 p. (Moscow. Aviatsionnyi tekhnologicheski institut. Trudy, no.54).

(MIRA 16:2)

5/026, 8d | 010/012, 002/003 9217/0306

ACTHCA:

Ivanov, G.T.

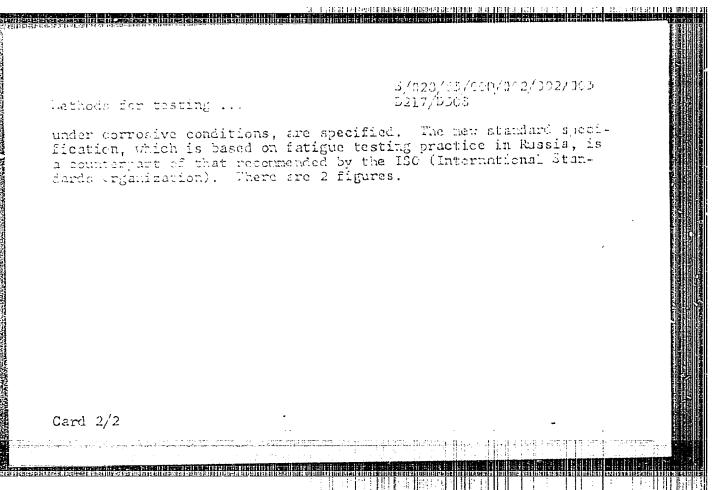
TITLE:

Methods for testing the fatigue limit of metals

PERIODICAL:

Standartizatsiya, no. 2, 1963, 22-24

TEXT: The Moskovskiy aviatsionnyy tekhnologicheskiy institut (Moscow Institute of aviation Technology) has drawn up specifications for methods of determining the fatigue limits of metals to replace the specification GOST 2860-45. Only established methods of specimen loading are dealt with, and the use of any type of machine satisfying conventional requirements is permissible. The loading methods allow fatigue testing by three types of determination: bending (both during rotation and in a fixed plane), push-pull and torsion in symmetrical and asymmetrical stress cycles. Specific shapes and sizes are recommended for the test specimens. Fatigue testing in the elastic low-cycle range at low cycle frequencies is dealt with in the scheme, and the requirements for testing special steels and other metals designed for service at high temperatures and also Card 1/2



15-57-4-5255

Referativnyy zhurnal, Geologiya, 1957, Nr 4, Translation from:

p 167 (USSR)

AUTHOR:

Ivanov, G. V.

TITLE:

Probability of Encountering Mica by Drilling (0 veroyatnosti vstrechi slyudy burovoy skvazhinoy)

PERIODICAL:

Tr. Vses. n.-i. in-ta, asbesta, slyudy, asbestotsement. izdeliy i proyektir. str-va predpriyatiy slyud.

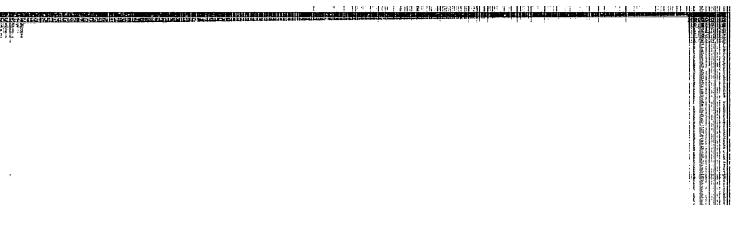
prom-sti, 1956, Nr 5, pp 34-38

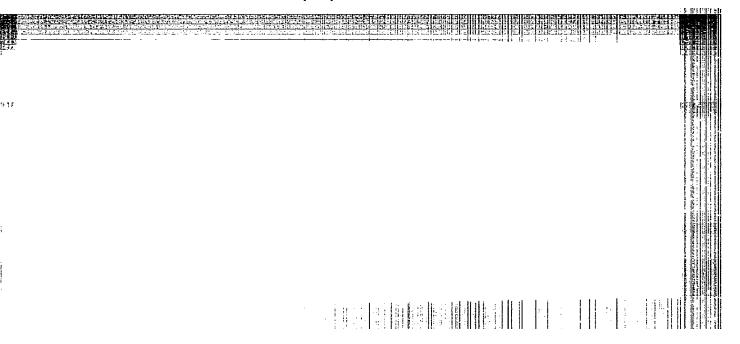
ABSTRACT:

The possibility of encountering mica in a drill hole exists, and, consequently, the possibility of quantitative evaluation of the mica content in the vein by means of a core sample also exists. The author proposes determination of the mica content--1) by making a linear measurement of the mica in the drill hole; 2) by measuring the volume of the individual mica crystals and relating it to the volume of the core

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDF

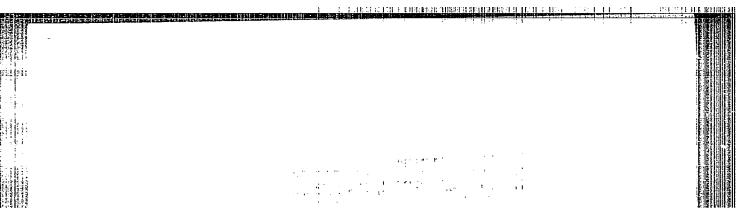


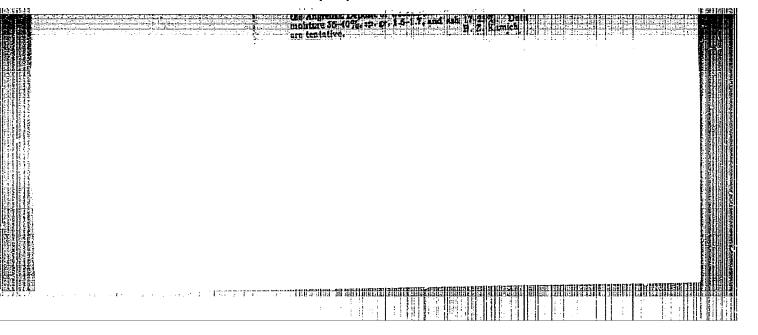


IVANOV. G. V.

"Investigation and Selation of Feeder Elements and a Housing for a Bouble Intake Centrifugal Shaft Ventilator." Cand Tech Sci, Bonets Industrial Inst, Stalino, 1954. (RZhMekh, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Tecnnical Dissertations Defended at USSR Higher Educational Institutions (14)



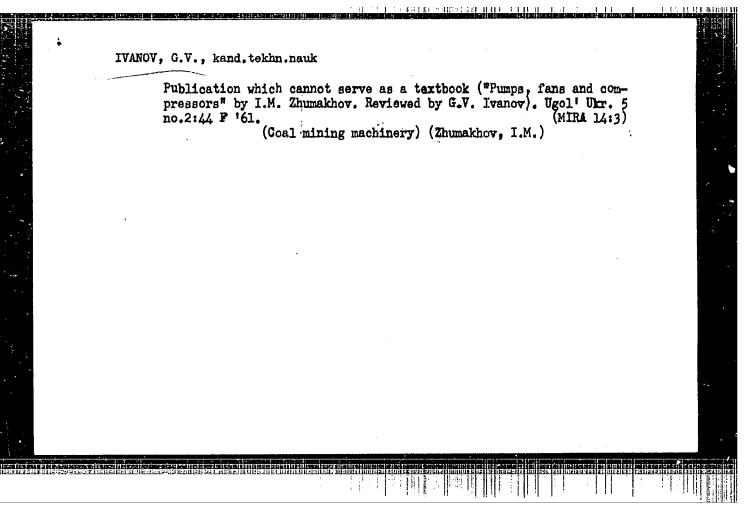


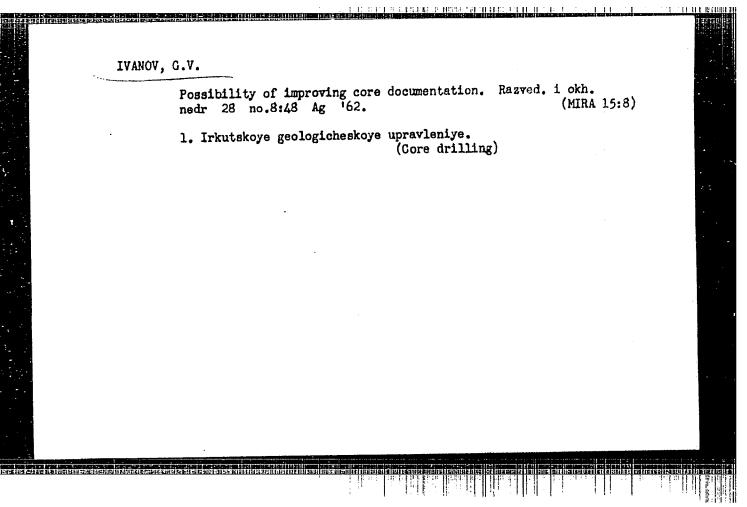
IVANTSOV, V.V., gornyy inzhener-elektromekhanik; KHANOV, F.P., starshiy nauchnyy sotrudnik; BABAK, G.A., mladshiy nauchnyy sotrudnik; KOLYSHKIN, O.M., aspizant; IVANOV, G.V., kandidet tekhnicheskikh nauk;
ZHUMAKHOV, I.M., dotsent.

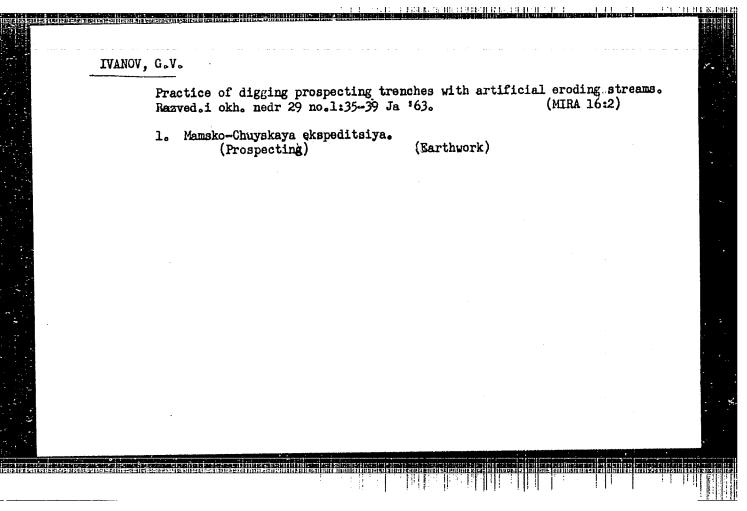
Ways of improving pumping installations and main ventilation fans
for the mining industry; discussion of I.M. Zhumakhov's article.
Gor.shur. no.12:36-40 D '56.

1. Unipromed (for Ivantsov). 2.Vsesoyuznyy ugol'nyy institut (for
Khanov and Kolyshkin) 3. Institut gornogo dela Akademii nauk USSR
(for Babak) 4.Molotovskiy gornyy institut (for Ivanov) 5.Moskovskiy
gornyy institut (for Zhumakhov).

(Mine pumps) (Mine ventilation)



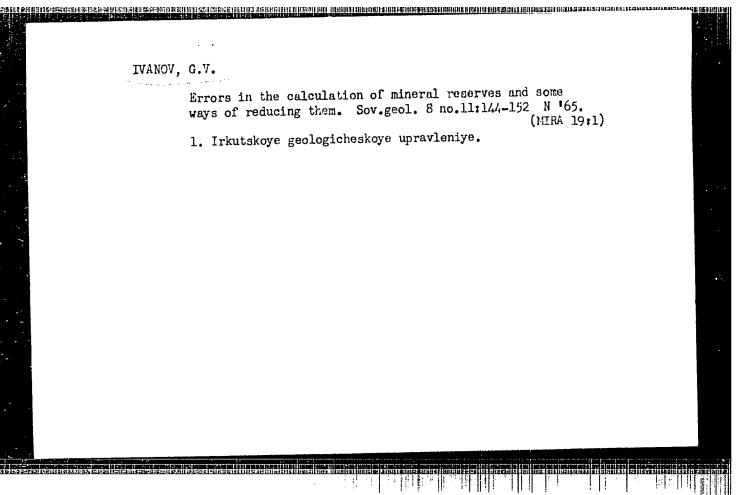




IVANOV, G.V., dotsent

Estimate of leakage in the rotor of a radial mine fan. Izv.vys.ucheb.
zav.jgor.zhur. 7 no.7:121-:24 '64. (MIRA 17:10)

1. Permskiy politekhnicheskiy institut. Rekomendovana kafedroy
gidravliki i gidravlicheskikh mashin.



ACC NR: AP6034397

UR/0195/66/007/005/0788/0794 SOURCE CODE:

AUTHOR: Komarov, V. F.; Boldyrev, V. V.; Zhuravlev, V. K.; Ivanov, G. V.

ORG: Tomsk Polytechnical Institute im. S. M. Kirov (Tomskiy politekhnicheskiy institut); Institute of Chemical Kinetics and Combustion, SO AN SOSR (Institut khimicheskoy kinetiki i goreniya SO AN SSSR)

TITLE: The mechanism of the effect of preliminary irradiation on the rate of thermal decomposition of ammonium perchlorate

SOURCE: Kinetika i kataliz, v. 7, no. 4, 1966, 788-794

TOPIC TAGS: ammonium perchlorate, thermal decomposition, irradiation effect, contaminant effect, chlorate ion, chloride ion, radiation induced defect, ammonium compound, perchlorate, x ray irradiation

ABSTRACT: A study has been made of the acceleration mechanism of the thermal decomposition of high-purity NH, ClO, preliminarily irradiated at room temperature with 200 kev x-rays on an RUP-200 apparatus. The decomposition rate of irradiated NHLC104 was compared with that of nonirradiated NH, ClO, and of NH, ClO, cc taminated with ClO3 and Cl ions. The results of experiments conducted at 2360 are given in figures 1 and 2. Curves 1, 2, 3 and 4 pertain to pure NH<sub>4</sub>ClO<sub>4</sub>, ; ¿ClO<sub>4</sub> containing 0.153 mol% ClO<sub>3</sub>, NH<sub>4</sub>ClO<sub>4</sub> containing 1.13 mol% ClO<sub>3</sub>, and NH<sub>4</sub>ClO irradiated with a dose of 4.5 x 10<sup>6</sup> rad, respectively. Discussion of the mechanism of the thermal decomposition of pure NH, ClO, led to the conclusion that the dec mposition is a result of losses of electrons by ClO, ions to form ClO, free rad als. The electrons UDC: 546.39'137:541. Card 1/3

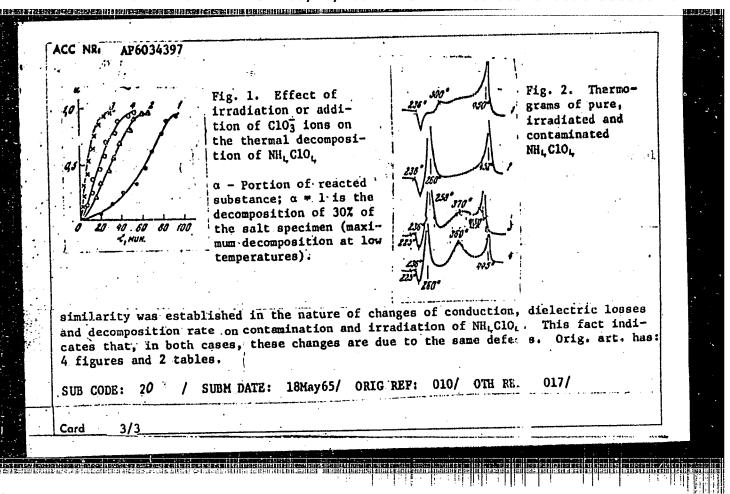
ACC NR: AP.6034397

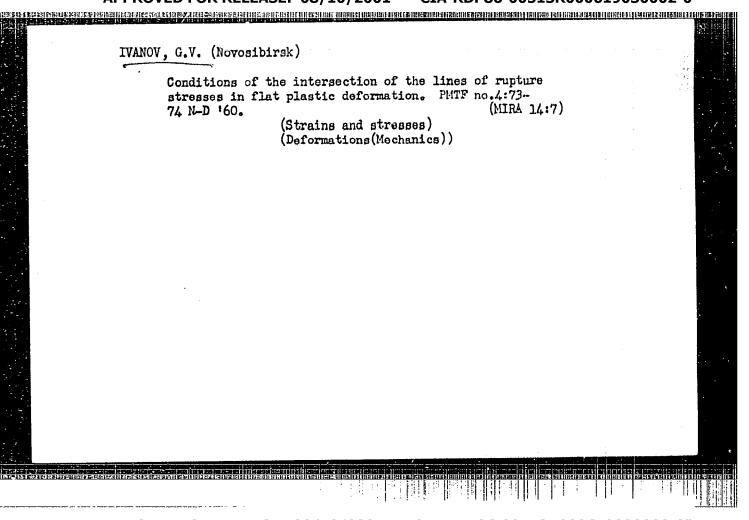
are gained by impurity levels such as  ${\rm C1O_3}^-$  ions formed in the co rse of the decomposition (Table 1). Theoretical analysis of the processes taking place and experimental

Table 1. Impurity content in the solid NH, ClO, rer due

Impurity content, mol%				
C1-	C103, C10, C102			
0.301	0.275 0.068 0.024			
֡	C1 <sup>-</sup>			

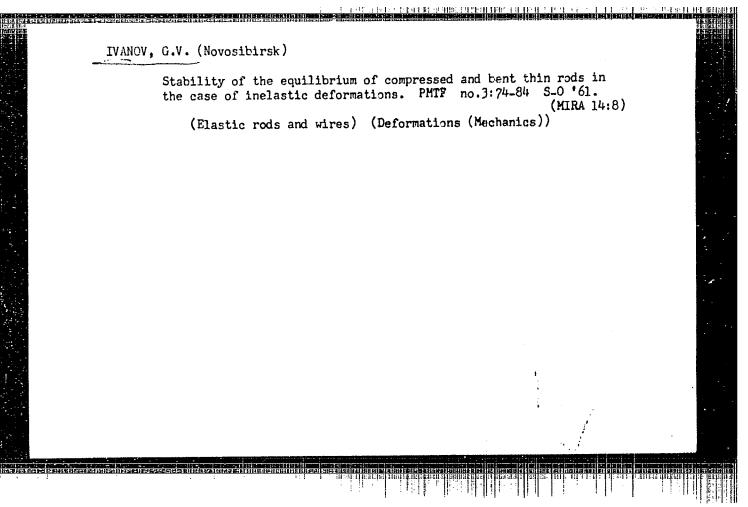
results indicated that the reaction rate of the thermal decomposition of NH<sub>L</sub>ClO<sub>L</sub>, increases with a decrease of the concentration of free electrons in NH<sub>L</sub>ClO<sub>L</sub>. In the case of irradiated NH<sub>L</sub>ClO<sub>L</sub>, the formation of ClO<sub>3</sub> ions is probable a ditional factors are considered: 1) the arrangement of ClO<sub>3</sub> ions formed at irradiation is not that it increases their catalytic activity; 2) formation of additional radi lysis products such as, among others, Cl<sup>-</sup> ions; however, no acceleration was observed on addition to NH<sub>L</sub>ClO<sub>L</sub> of the same amounts of Cl<sup>-</sup> ions as are formed on irradiation; 3) formation of radiation-induced defects. Among these factors, the formation of lefects appears to be most probable. Determination of the type of these defects require further studies. A Cord 2/3





IVANOV, G. V. Cand Phys-Math Sci - (diss) "Generalization on the example of non-elastic deformations of the classical criterion of equilibrium stability for elastic deformations." Novosibirsk, 1961. 12 pp; (Academy of Sciences USSR, Siberian Division, Joint Academic Council for Phys-Math and Tech Sci); 250 copies; price not given; (KL, 10-61 sup, 204)

> CIA-RDP86-00513R000619030002-0" APPROVED FOR RELEASE: 08/10/2001



IVANOV, G.V. (Novosibirsk); NEMIROVSKIY, Yu.V. (Novosibirsk); RABOTNOV, Yu.W. (Novosibirsk)

Dynamics of a rigidly plastic system of cross bracings. Izv. AN SSSR Otd. tekh. nauk. Mekh. i mashinostr. nc.2:51-57 Mr-Ap '63. (MIRA 16:6)

(Structural frames)

17035-63

ENF(q)/FWI(m)/HUS

AFFTO/ASD JE/

s/207/63/000/002/012/025

59

AUTHOR:

Ivanov, G. V. (Novosibirsk)

TITIE:

Stability of layer equilibrium according to the theory of

plastic flow 4

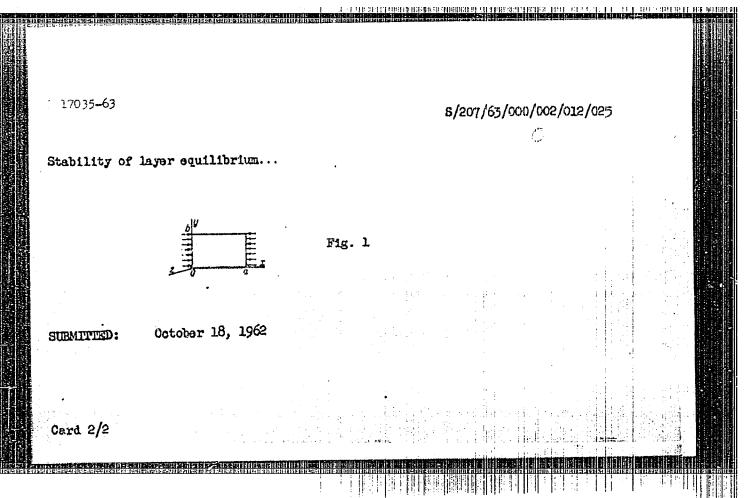
PERIODICAL:

Zhurnel prikladnov mechaniki i technicheskov fiziki, no. 2,

1963, 108-112

TEXT: The author investigates the compression along one direction of a plate shown on Fig. 1 whose all sides are fixed, or two sides are fixed and two are fixed. The critical stresses were determined using the criterion given by the author in an earlier article (Ref. 1: PMTF, 1961, No. 1) with the restriction that during the transition from the ground state to the adjacent one no perturbations are permitted which would cause a relief from the load. The plate material is assumed incompressible. The critical stresses found using the theory of plastic flow are slightly smaller but still quite close to those calculated in the theory of small elastically-plastic deformations using the criterion given in Ref. 1, or the Shenley criterion. There are 3 figures.

Card 1/2



EWP(r)/EWT(m)/BDS-EM L 9929-63 8/0207/63/000/003/0111/0116 ACCESSION NR: AP3002815 Ivanov, G. V. (Novosibirsk) AUTHOR: On plastic stability of a cylindrical shell under exial compression Zhurnal prikladnov mekhaniki i tekhnicheskov fiziki, no. 3, 1963, SOURCE: 111-116 TOPIC TACS: exially compressed cylindrical shell, plastic stability ABSTRACT: The exisymmetrical buckling of a cylindrical shell subjected to exial compression is exemined under the assumptions that the material of the shell is incompressible and the strain-hardening process is linear. Buckling stresses are determined by means of a criterion previously derived by the suthor whose application does not cause the known paradox encountered when Shanley's stability criterion is used. The erroneousness of the solution contained in an article by L. H. N. Lee (Inelastic Buckling of Initially Imperfect Cylindrical Shells Subject to Axial Compression. Journal of the Aerospace Sciences, vol. 29, no. 1, 1962) is pointed out as is the associated unsubstantiated conclusion that the Card 1/2

L 9929-63

ACCESSION NR: AP3002815

consideration of initial imperfections does not help to avoid the paradox. The concept of additional stresses, strains, and displacements (caused by the change of the axial compression force) is used in deriving the expressions for critical stresses Signa sub or from equations of the theory of plastic flow with strain hardening. Formulas are given for critical stresses Signa sub pf and Signa sub as derived by other authors by using the theory of plastic flow and the theory of small elastoplastic strains, respectively, under the assumptions of incompressibility and linear strain hardening of the shell material. The relationships between nondimensional ratios of each of these critical stresses and of the Euler critical stress to the yield point are plotted in a diagram which shows that there is no paradox. The cause of the error in Lee's article is discussed. Orig. art. has: I figure and 22 formulas.

ASSOCIATION: none

SUBMITTED: 09Feb63

DATE ACQ: 16Jul63

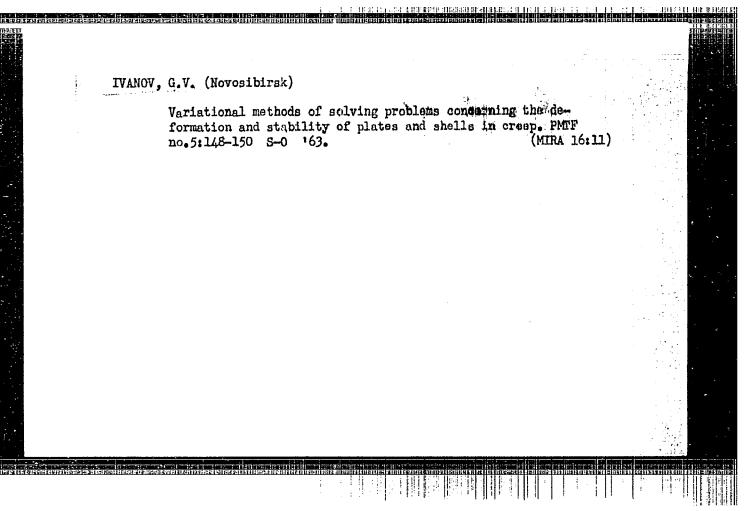
ENCL: CO

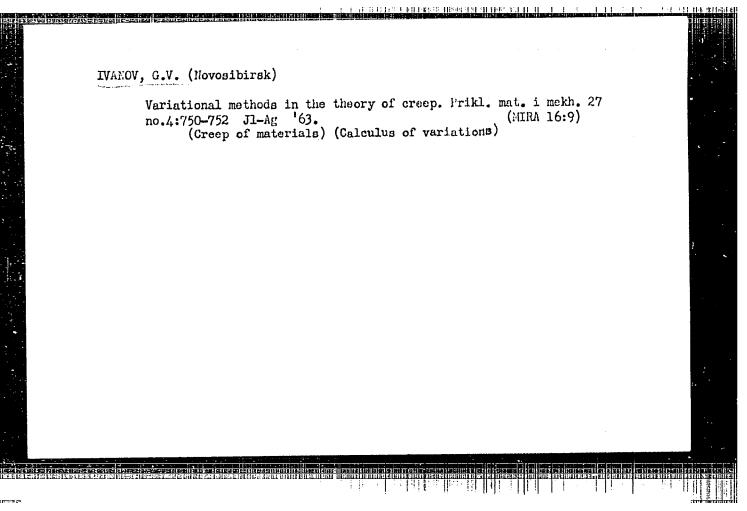
SUB CODE: 00

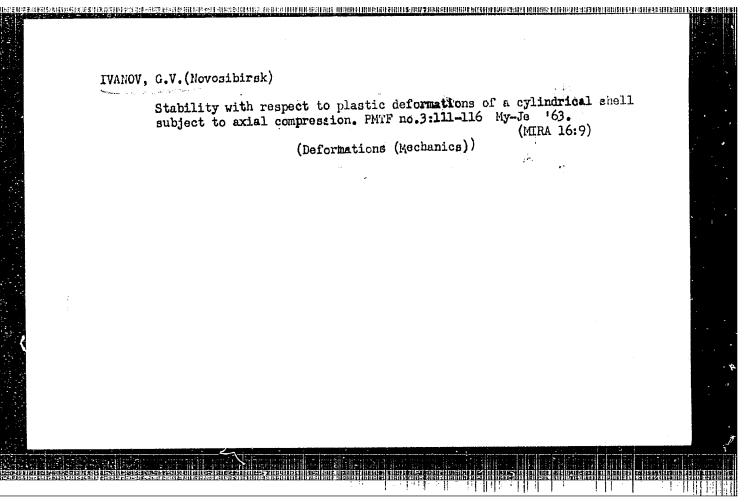
NO REF SOV: 006

OTHER: 003

GF/ 1/2







L 04975-67 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/ETI/EWP(k) LGP(c) JD/WW/EM ACC NR: AP6030811 SOURCE CODE: UR/0424/66/000/003/0089/0098

AUTHOR: Ivanov, G. V. (Novosibirsk); Shepelenko, V. N. (Novosibirsk)

ORG: none

TITLE: Buckling and snapping under creep conditions of a square cylindrical panel compressed along its directrix

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 3, 1966, 89-98

TOPIC TAGS: creep buckling, creep snapping, panel buckling, panel snapping, shell buckling, shell snapping, creep, buckling, cylindric shell at meture

ABSTRACT: A square cylindrical pane Compressed along its directrix is used as a model in a theoretical study of the buckling and the following oil-can effect of a cylindrical shell subjected to axial compression under creep conditions. The study is based on variational formulation of the creep problem for shallow cylindrical shells applying the power law to the flow with a certain index of creep. Only two methods used in overcoming the difficulties associated with determining the stress distribution along the shell thickness are discussed: 1) assuming that strains deviate slightly from the membrane state in the shell; the relations between stresses and strain rate are linearized with respect to differences between these quantities in membrane and nonmembrane states; and 2) assuming a linear stress distribution over the shell thickness, and determining the real distribution parameters by a

Card 1/2

L 04975-67 ACC NRI AP6030811 variational method based on variations of stresses and displacements. It is shown by way of comparison, that the results obtained for linear and nonlinear stress distributions are practically identical in the case of creep buckling of a square cylindrical panel with nondeformable edges compressed along its directrix. The phenomenon of snapping under creep conditions is discussed as an instantaneous transition of the shell from one mode of equilibrium to another. A system of ten differential equations for determining the stresses, deflections, and snapping of the panel under creep conditions are derived, starting with the solution of this problem for the elastic range (the initial state for the creep when the time parameter  $\tau = 0$ ). A way of simplifying this system is outlined, its numerical integration by the Runge-Kutta method is discussed, and the results are presented. Conclusions concerning snapping (time, critical load), equilibrium modes, and the effect of linearizing the creep law on the panel behavior are drawn. Orig. art. has: 4 figures and 22 formulas. SUB CODE: 20/ SUBM DATE: 14Aug65/ ORIG REF: 008/ OTH REF: 002

Card 2/2 both

Wansu, E.V.

Card 1/1

Subject : USSR/Hydr. Eng.

Pub. 35 - 12/18

Author

: Ivanov, G. V., Eng.

Title : On regulating eroding flood waters by a system of ponds.

Periodical: Gidro. stroi., 8, 35, 1955

Abstract : A mathematical analysis of the design of artifical ponds, considering river fall, distance between ponds,

AID P - 4005

Institution: None

Submitted : No date

SOV/124-57-5-5790

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 107 (USSR)

Shifrin, S. M., Ivanov, G. V. AUTHORS:

Analog Simulation of Vertical Settling Tanks (Modelirovaniye TITLE:

vertikal'nykh otstoynikov)

PERIODICAL: Nauch. tr. Leningr. inzh.-stroit. in-ta, 1955, Nr 20, pp 38-58

ABSTRACT: Description of a laboratory method and the results derived therefrom are given relative to the investigation of vertical settling tanks with the aim of developing an efficient system of settling tanks for the sewerage-purging system of the Leningrad Meat-processing Plant currently being rebuilt (8 vertical circular settling tanks of usual design with a 6-m diameter and an 8-m height). The investigations were conducted at the laboratory of the LISI (Leningrad Structural Engineering Institute) with the aid of a model manufactured out of plexiglas and scaled to 1:15. The simulation was conducted according to the A. G. Averkiyev method (Vses. n.-i. in-t gidrotekhn., 1952) based on the analog simulation of a free surface with the substitution of a pressure flow for the free-surface flow. The authors consider it

feasible to evaluate the hydraulic performance characteristic of the Card 1/2

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619030002-0"

Analog Simulation of Vertical Settling Tanks

SOV/124-57-5-5790

settling tank according to the coefficient of water circulation, i.e., the ratio of the sum total of the transient and twice the circulatory discharge of water divided by the transient discharge at the characteristic cross section of the settling tank.

Kh. A. Navoyan

Card 2/2

A UTHOR Ivanov, G.V. 507/5-33-1-11/25 TITLE: New Data on the Dynamic Structure of Mud. and Stone-Carrying Streams (Novyye dannyye o dinamicheskey strukture selevykh potokov) PERIODICAL: Byulleten: Moskovskogo obshchestva ispytateley prirody, Otdel geologicheskiy, 1958, Vol 35, Nr 1, pp 107-121 (USSR) ABSTRACT: The author for 4 years studied the composition and dynamic structure of mud- and stone-carrying streams (created artificially for the prupose of study), and the measures of protection to be taken against them. he describes different phases and aspects of such streams, moving downhill, in which both the liquid and solid elements play an equally active part. Large fragments of rocks brought into motion by other fragments or by the liquid element of the stream move forward under the impulse of gravity, and the stream as a whole, gains an enormous inertial strength. As an effec-Card 1/2 tive defence against such streams the author proposes the

507/5-33-1-11/25

New Data on the Dynamic Structure of Mud- and Stone-Carrying Streams

erection of either reinforced concrete buttresses arranged in a checkered manner in the bed of streams or of a series of dikes located upstream near inhabited places, as it is done for the regulation of mountain streams in W.Europs. In the foot note, the editors invite further discussion on this subject. Some of the author's findings are said to be valuable, but on the other hand, some of them are not sufficiently substantiated. The following geologists are cited by the author: M.A. Velikanov, S.V. Obruchev, S.M. Fleyshman, N.S. Dyurnbaum and M.S. Gagoshidze. There are 3 cross-sections, 1 scheme and 10 Soviet references.

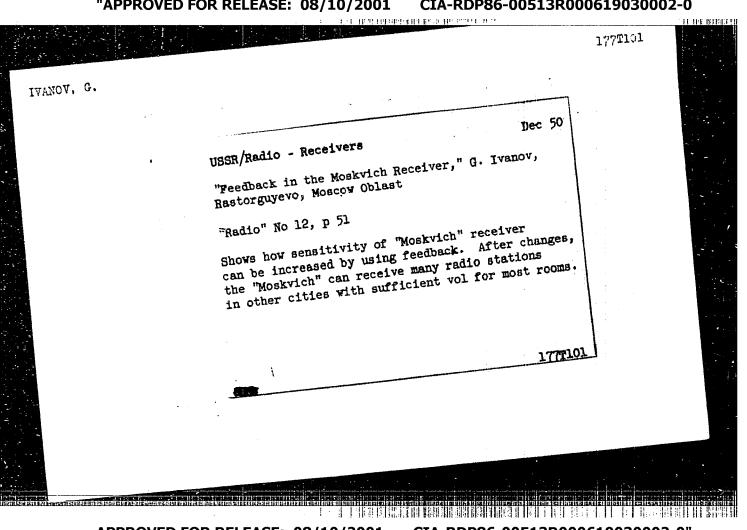
Card 2/2

IVANOV, G. V., Candidate Tech Sci (diss) -- "Investigation of clarifiers for waste waters". Leningrad, 1959. 19 pp (Min Higher Educ USSR, Leningrad Order of Labor Red Banner Construction Engineering Inst, Chair of Sewerage), 150 copies (KL, No 21, 1959, 115)

IVAROV, G V.

Using an electronic computer to detenable the errors in the estimation of reserves. Pazved. 1 okn. medr 31 no.2:15-17
F 165.

1. Kompleksnaya tematichesknya eksueditsiya Irkutskogo goologicheskogo upravleniya.

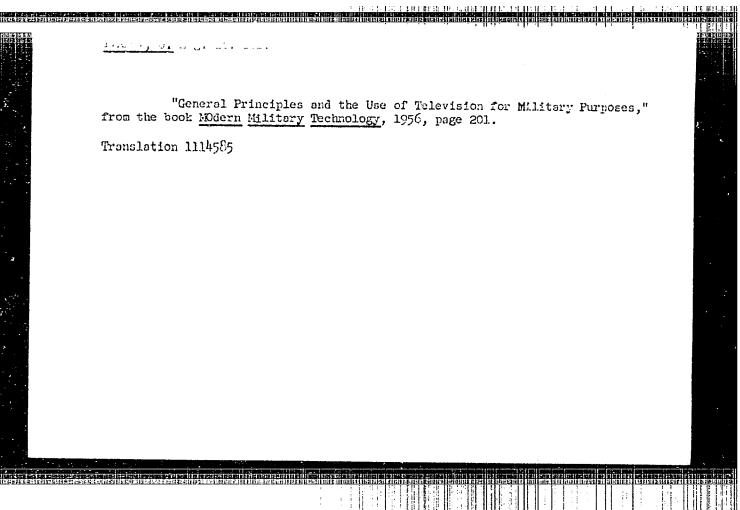


APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000619030002-0"

IVANOV, G. (Engr. Lt. Col.)

"Television in Military Activity - General Principles and Capabilities,"

Red Star, 21 Jun 55



#### "APPROVED FOR RELEASE: 08/10/2001

#### CIA-RDP86-00513R000619030002-0

IUDN 00, G.C.

USSR / Radiophysics

I

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 10042

Author

Ivanov, G.V.

Inst

: Not given

Title

: Control Over the Width of the Radiation Spectrum of a Radio

Orig Pub : Vestn. svyazi, 1956, No 10, 3-5

Abstract : Description of a radio spectrometer, developed by the center for technical radio control of the Ministry of Communication, USSR. A method of measuring the width of the radiation spectrum of a radio station with the aid of a radio spectrometer, and also with the aid of a radio receiver with a quartz filter, is considered.

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Card

: 1/1

AUTHOR:

Ivanov, G., Leningrad

107-58-6-55/58

TITLE:

Installing a Transformer (Ustanovka transformatora)

PERIODICAL:

Radio, 1958, Nr 6, p 61 (USSR)

ABSTRACT:

In order to save space and additional parts for fastening a powerful radio transformer to the chassis, the author suggests to making a H-shaped cut and bending edges outward.

There is one sketch.

Card 1/1

1. Transformers-Installation

IVANOV, G.V., inzh.; SOBOLEVSKIY, Ye.A., inzh.; ALTUNIN, V.I., inzh.

Determination of the frequency bendvidth of the rise and fall of a signal with respect to time. Vest. sviazi 24 no.12:6-8 (MIRA 18:2)

JD/HW 32678-66 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) ACC NRI AP6006440 SOURCE CODE: UR/0420/65/000/003/0084/0085

AUTHORS: Lopatin. A. I.; Balyberdin, V. V.; Chumachenko, V. S.; Fomenko, V. I.; Ivanov. G. V.; Trubchaninov, F. A.; Kirichenko, R. F. 18

ORG: none

TITIE: Radiotechnical method for measuring the motion parameters of the blank during sheet metal atamping

SOURCE: Samoletostroyeniye i tekhnika vozdushnogo flota, no. 3, 1965, 84-85

TOPIC TAGS: metal stamping, test instrumentation, UHF instrument

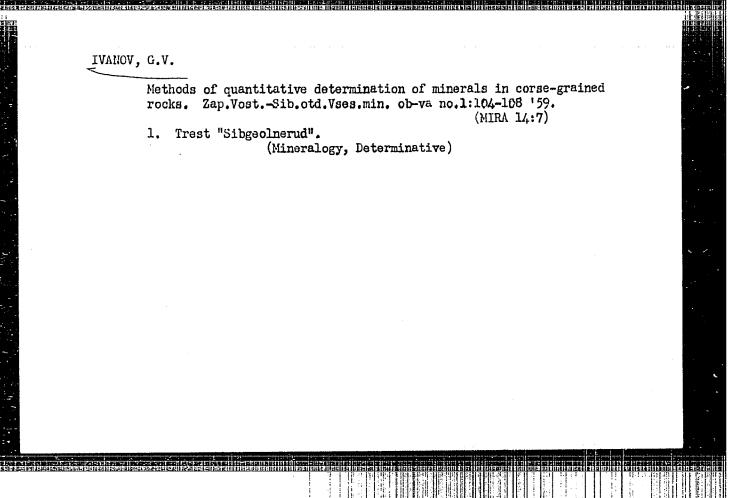
ABSTRACT: A mostly qualitative description of a radiotechnical method for measuring the displacement of the die during sheet metal stamping is briefly presented. The method consists of attaching a metal "flag" to the die and using this flag to partially block the path between two ultrahigh frequency waveguides, one of which serves as a transmitter and the other as detector. After calibrating the change in transmitted UHF energy as a function of flag position in the gap between the guides, this curve can be used to interpret the die motion (position or velocity) as recorded on an oscilloscope during a stamping operation. Any centimeter range UHF generator can be used. A sample calibration curve and a sample stamping curve are presented without details or specifications as to operating ranges, accuracy, etc. Orig. art. has: 3 figures.

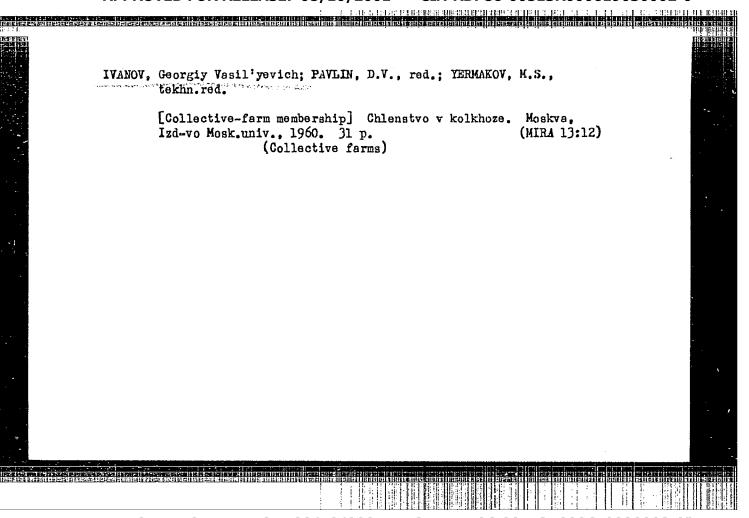
SUBM DATE: none/ ORIG REF: OOL

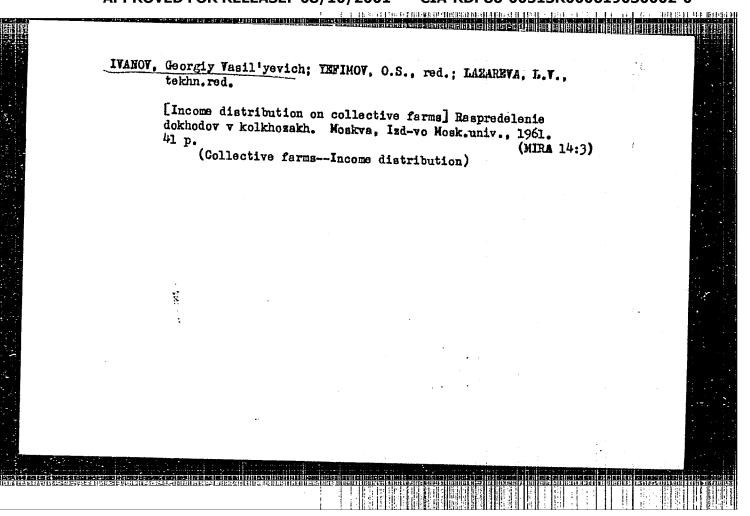
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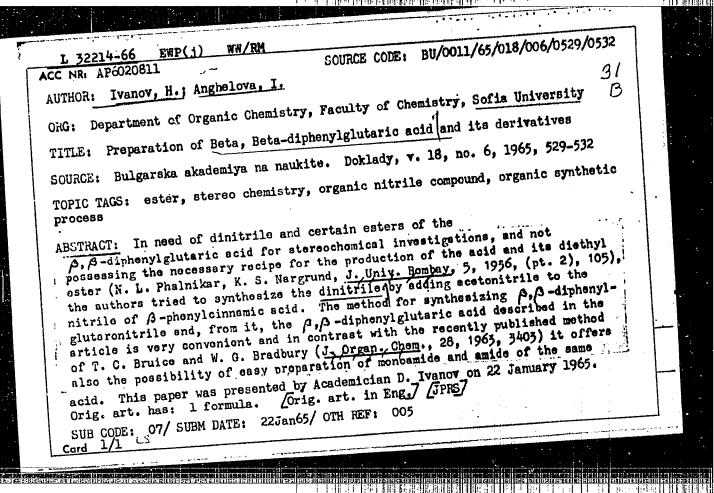






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IVONOV G. YA.		ECEASED			14 +	gian Hi		
RESEARCH, INDUSTRIAL		(1962)					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
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BULGARIA/Cultivated Plants - Fruits. Berries. Abs Jour : Ref Zhur - Biol., No 4, 1958, 15796 М. Author : I. Ivanov, K. Katerov Inst Title : The Vrachanskiy Muscadine, a Valuable Variety for Domestic Viticulture and Wine Making. (Vrachanskiy muskat-tsennyy sort dlya nashego vinogradarstave i vinodeliya). Orig Pub : Lozarstvo i vinarstvo, 1956, 5, No 4, 206-210 Abstract : No abstract. Card 1/1

IVANOV, I.

"Installation of bearings on small mining cars."
p.36 (Tekhnika, Vol. 6, no. 8, 1957, Sofiia, Bulgaria)

Monthly Index of East European Accessions (EEAI) IC, Vol. 7, No. 8, August 1958

IVANOV, I.

"Introducing lifting machines with friction plates in the Bulgarian mines."
p.18 (Tekhnika, Vol. 7, no. 2, 1958, Sofiia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

COLOVANOV, N., zasluzhennyv master sportu; iVANOV, I., kapitus; MGISZYEV, V.;
SOBKO, V.; SHIMANOV, N., general-polkovnik aviausii zepasa

Pacts, events, people. Kryl. rod. 15 no.11:26-27 N 164.

(MIRA 18:3)

TVANCY, I\*

"Calculting and proving the total excess in a first-class (riangulate net."

GCDISHNIK: Vol. 4, No. 2, 1956/57; Soflia, Bulgoria

Monthly list of EAST EUROPE'N ACCESSIONS INDEX (EMAI), Library of Congress, Vol. 8, No. 8, August, 1959

Unclansified

